

IN THE CLAIMS:

This list of claims will replace all prior versions, and listings of claims in the application.

Please amend claims 1 and 11 as follows:

1. (Currently Amended) A data transmission controlling method for controlling transmission of data from data transmitting means to data receiving means over communication channels, said data transmission controlling method comprising the steps of:

transmitting encrypted data over a first communication channel from said data transmitting means to said data receiving means, said encrypted data encrypted by said data transmitting means, said first communication channel provided for data transmission only from said data transmitting means to said data receiving means; and

transmitting ~~restrictive data transmission control information~~ a request for a decryption key over a second communication channel from said data ~~transmitting~~ receiving means to said data ~~receiving~~ transmitting means ~~upon request for a decryption key by a conditional access managing unit incorporated in said data receiving means, said restrictive data transmission control information causing the encrypted data to be received solely by specific data receiving means~~ at least (a) when the data receiving means fails to correctly receive the decryption key, (b) when a new data receiving means is connected, and (c) when a data receiving means rejoins connection after a failure, said second communication channel having a smaller capacity of data transmission than said first communication channel, ~~said second communication channel also being used for data transmission from said data receiving means to said data transmitting means,~~ wherein said second communication channel is a communication channel permitting

bidirectional communication between said data transmitting means and said data receiving means.

2. (Cancelled).

3. (Previously Presented) The data transmission controlling method according to claim 1, wherein said data transmitting means performs data encryption using an encryption key and wherein said encrypted data from said data transmitting means are decrypted by said data receiving means utilizing the decryption key identical to said encryption key used in the data encryption.

4. (Previously Presented) The data transmission controlling method according to claim 3, wherein said encryption key and said decryption key are session keys for encrypting and decrypting information and data.

5. (Previously Presented) The data transmission controlling method according to claim 4, wherein said session keys are updated at predetermined intervals.

6. (Previously Presented) The data transmission controlling method according to claim 4, wherein said data transmitting means and said data receiving means have a master key specific to said data receiving means;

wherein said data transmitting means encrypts said session keys using said master key and transmits the encrypted session keys to said data receiving means over either said first communication channel or said second communication channel; and

wherein said data receiving means decrypts said encrypted session keys received using said master key.

7. (Previously Presented) The data transmission controlling method according to claim 6, wherein said data transmitting means possesses said session keys corresponding to all data receiving means authorized to receive specific information and data; and

wherein said data transmitting means transmits in advance said session keys to said data receiving means authorized to receive specific information and data.

8. (Previously Presented) The data transmission controlling method according to claim 1, wherein said first communication channel is a satellite link permitting unidirectional communication from said data transmitting means to said data receiving means; and

wherein said second communication channel is a communication channel permitting bidirectional communication between said data transmitting means and said data receiving means.

9. (Previously Presented) The data transmission controlling method according to claim 1, wherein said data receiving means is constituted as an IP router.

10. (Previously Presented) The data transmission controlling method according to claim 1, wherein said data receiving means is constituted as a bridge.

11. (Currently Amended) A data transmission system comprising:
data transmitting means for encrypting and transmitting data;
data receiving means for receiving said encrypted data from said data transmitting means;
~~said data receiving means having incorporated therein a condition access managing unit;~~
a first communication channel used to transmit said encrypted data only from said data transmitting means to said data receiving means; and
a second communication channel having a smaller capacity of data transmission than said first communication channel, said second communication channel used to transmit a request for a decryption key ~~restrictive data transmission control information from said data transmitting means to said data receiving means upon request for a decryption key by said conditional access managing unit, said restrictive data transmission control information causing the encrypted data to be received solely by specific data receiving means and said second communication channel also being used for data transmission~~ from said data receiving means to said data transmitting means at least (a) when the data receiving means fails to correctly receive the decryption key, (b) when a new data receiving means is connected, and (c) when a data receiving means rejoins connection after failure, wherein said second communication channel is a communication channel permitting bidirectional communication between said data transmitting means and said data receiving means.

12. (Previously Presented) The data transmission system according to claim 11, wherein said data transmitting means performs data encryption using an encryption key and wherein said encrypted data from said data transmitting means are decrypted by said data receiving means utilizing the decryption key identical to said encryption key used in the data encryption.

13. (Previously Presented) The data transmission system according to claim 12, wherein said encryption key and said decryption key are session keys for encrypting and decrypting information and data.

14. (Previously Presented) The data transmission system according to claim 13, wherein said session keys are updated at predetermined intervals.

15. (Previously Presented) The data transmission system according to claim 13, wherein said data transmitting means and said data receiving means have a master key specific to said data receiving means;

wherein said data transmitting means encrypts said session keys using said master key and transmits the encrypted session keys to said data receiving means over either said first communication channel or said second communication channel; and

wherein said data receiving means decrypts said encrypted session keys received using said master key.

16. (Previously Presented) The data transmission system according to claim 15, wherein said data transmitting means possesses said session keys corresponding to all data receiving means authorized to receive specific information and data; and

wherein said data transmitting means transmits in advance said session keys to said data receiving means authorized to receive specific information and data.

17. (Previously Presented) The data transmission system according to claim 11, wherein said first communication channel is a satellite link permitting unidirectional communication from said data transmitting means to said data receiving means.

18. (Previously Presented) The data transmission system according to claim 11, wherein said data receiving means is constituted as an IP router.

19. (Previously Presented) The data transmission system according to claim 11, wherein said data receiving means is constituted as a bridge.